

## CLAIMS

What is claimed is:

- 5     1.     A method of email administration,
- the method implemented in a transcoding gateway, the transcoding gateway comprising client device records stored in computer memory, each client device record representing a client device, each client device record including
- 10             a mailbox address field,  
              an internet address field,  
              a digital file format code field, and  
              a path name field,
- 15     the transcoding gateway further comprising at least one file system, each file system further comprising file system storage locations, each file system storage location having a path name,
- 20     the method comprising the steps of:
- receiving in the transcoding gateway an email message, the email message comprising at least one destination mailbox address, the email message further comprising at least one digital object;
- 25             transcoding the digital object into a digital file having a digital format and a file name; and

downloading the digital file to a destination client device at an internet address recorded in an internet address field of a client device record, the client device record having:

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recorded in the client device record's mailbox address field, a mailbox address identical to the destination mailbox address of the email message, and,

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recorded in the client device record's digital file format code field, a digital file format code indicating that the client device represented by the client device record is capable of receiving the digital format of the digital file.

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2. The method of claim 1 further comprising recording a multiplicity of client device records representing a multiplicity of client devices, including recording for each client device a mailbox address, an internet address where the client is to be found on an internet, a digital file format code identifying a digital file format that the client device is capable of receiving, and a path name identifying a location in a file system where digital files for each client device are to be stored.

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3. The method of claim 1 wherein receiving an email message further comprises receiving an email message by use of a standard email protocol.

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4. The method of claim 3 wherein the standard email protocol is SMTP.

5. The method of claim 3 wherein the standard email protocol is POP3.
6. The method of claim 1 wherein the file name includes a file name extension identifying the digital format of the digital file.
- 5 7. The method of claim 1 wherein each client device represented by a client device record comprises automated computing machinery, a web browser, and an internet client having an internet address.
- 10 8. The method of claim 1 wherein the downloading is carried out by use of HTTP.
9. The method of claim 1 further comprising the steps of:
- 15 storing the digital file in a file system location having a digital file path name identical to a path name recorded in a path name field in a client device record, the client device record having recorded in its mailbox address field a mailbox address equal to the mailbox address of the email message; and
- 20 encoding the digital file path name and the file name of the digital file into an HTML document having a conventional file name;
- 25 wherein downloading the digital file to the client device further comprises downloading the HTML document.

10. The method of claim 9 wherein encoding the digital file path name and the file name of the digital file into an HTML document further comprises encoding a URL in a hyperlink in an HTML document.
- 5 11. The method of claim 9 wherein the conventional file name is "index.html."
12. The method of claim 9 wherein the conventional file name is "index.htm."
- 10 13. The method of claim 9 further comprising storing the HTML document in the file system location identified by the path name.
14. The method of claim 9 wherein downloading the digital file further comprises:
- 15 receiving, from a client device, a first HTTP request message requesting the HTML file having the conventional file name, wherein the first HTTP request message includes a client internet address for the client device;
- 20 sending, in an HTTP response message to the client device, the HTML document having the conventional file name from a file system location identified a path name recorded in a client device record's path name field of a client record whose internet address field contains an internet address equal to the client internet address; and

receiving from the client device a second HTTP request message,  
wherein the second HTTP request message requests downloading of  
the digital file identified by the path name and the file name of the  
digital file encoded into the HTML document.

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15. The method of claim 1 wherein receiving an email message further comprises  
posting the email message to a destination mailbox at the destination mailbox  
address.

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16. The method of claim 1 further comprising delivering the email message from  
the destination mailbox to an email client, wherein the delivering is carried out  
by use of a standard email protocol.

17. The method of claim 17 wherein the standard email protocol is POP.

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18. The method of claim 17 wherein the standard email protocol is POP3.

19. The method of claim 1 wherein the destination client device is an audio player  
and the digital format of the digital file is MP3.

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20. The method of claim 1 wherein the destination client device is a video player  
and the digital format of the digital file is MPEG.

21. The method of claim 1 wherein the destination client device is a digital picture  
frame and the digital format of the digital file is JPEG.

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22. The method of claim 1 wherein the destination client device is a digital picture frame and the digital format of the digital file is GIF.

23. A system for email administration,

the system implemented as a transcoding gateway, the transcoding gateway  
comprising client device records stored in computer memory, each client  
5 device record representing a client device, each client device record including

a mailbox address field,  
an internet address field,  
a digital file format code field, and  
10 a path name field,

the transcoding gateway further comprising at least one file system, each file  
system further comprising file system storage locations, each file system  
storage location having a path name,

15 the system comprising:

means for receiving in the transcoding gateway an email message, the  
email message comprising at least one destination mailbox address, the  
20 email message further comprising at least one digital object;

means for transcoding the digital object into a digital file having a  
digital format and a file name; and

25 means for downloading the digital file to a destination client device at  
an internet address recorded in an internet address field of a client  
device record, the client device record having:

recorded in the client device record's mailbox address field, a mailbox address identical to the destination mailbox address of the email message, and,

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recorded in the client device record's digital file format code field, a digital file format code indicating that the client device represented by the client device record is capable of receiving the digital format of the digital file.

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24. The system of claim 23 further comprising means for recording a multiplicity of client device records representing a multiplicity of client devices, including means for recording for each client device a mailbox address, an internet address where the client is to be found on an internet, a digital file format code identifying a digital file format that the client device is capable of receiving, and a path name identifying a location in a file system where digital files for each client device are to be stored.

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25. The system of claim 23 wherein means for receiving an email message further comprises means for receiving an email message by use of a standard email protocol.

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26. The system of claim 25 wherein the standard email protocol is SMTP.

- 25 27. The system of claim 25 wherein the standard email protocol is POP3.



28. The system of claim 23 wherein the file name includes a file name extension identifying the digital format of the digital file.
29. The system of claim 23 wherein each client device represented by a client  
5 device record comprises automated computing machinery, a web browser, and an internet client having an internet address.
30. The system of claim 23 wherein the means for downloading utilizes HTTP.
- 10 31. The system of claim 23 further comprising:
- means for storing the digital file in a file system location having a digital file path name identical to a path name recorded in a path name field in a client device record, the client device record having recorded  
15 in its mailbox address field a mailbox address equal to the mailbox address of the email message; and
- means for encoding the digital file path name and the file name of the digital file into an HTML document having a conventional file name;
- 20 wherein means for downloading the digital file to the client device further comprises means for downloading the HTML document.
32. The system of claim 31 wherein means for encoding the digital file path name  
25 and the file name of the digital file into an HTML document further comprises means for encoding a URL in a hyperlink in an HTML document.

33. The system of claim 31 wherein the conventional file name is "index.html."

34. The system of claim 31 wherein the conventional file name is "index.htm."

5 35. The system of claim 31 further comprising means for storing the HTML document in the file system location identified by the path name.

36. The system of claim 31 wherein means for downloading the digital file further comprises:

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means for receiving, from a client device, a first HTTP request message requesting the HTML file having the conventional file name, wherein the first HTTP request message includes a client internet address for the client device;

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means for sending, in an HTTP response message to the client device, the HTML document having the conventional file name from a file system location identified a path name recorded in a client device record's path name field of a client record whose internet address field contains an internet address equal to the client internet address; and

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means for receiving from the client device a second HTTP request message, wherein the second HTTP request message requests downloading of the digital file identified by the path name and the file name of the digital file encoded into the HTML document.

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37. The system of claim 23 wherein means for receiving an email message further comprises means for posting the email message to a destination mailbox at the destination mailbox address.
- 5 38. The system of claim 23 further comprising means for delivering the email message from the destination mailbox to an email client, wherein the means for delivering utilizes a standard email protocol.
39. The system of claim 38 wherein the standard email protocol is POP.
- 10 40. The system of claim 38 wherein the standard email protocol is POP3.
41. The system of claim 23 wherein the destination client device is an audio player and the digital format of the digital file is MP3.
- 15 42. The system of claim 23 wherein the destination client device is a video player and the digital format of the digital file is MPEG.
43. The system of claim 23 wherein the destination client device is a digital picture frame and the digital format of the digital file is JPEG.
- 20 44. The system of claim 23 wherein the destination client device is a digital picture frame and the digital format of the digital file is GIF.

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45. A computer software product for email administration,

the computer software product capable of implementation in conjunction with  
a transcoding gateway, the transcoding gateway comprising client device  
5 records stored in computer memory, each client device record representing a  
client device, each client device record including

a mailbox address field,  
an internet address field,  
10 a digital file format code field, and  
a path name field,

the transcoding gateway further comprising at least one file system, each file  
system further comprising file system storage locations, each file system  
15 storage location having a path name,

the computer software product comprising:

a recording medium;

20 means, recorded on the recording medium, for receiving in the  
transcoding gateway an email message, the email message comprising  
at least one destination mailbox address, the email message further  
comprising at least one digital object;

25 means, recorded on the recording medium, for transcoding the digital  
object into a digital file having a digital format and a file name; and

means, recorded on the recording medium, for downloading the digital file to a destination client device at an internet address recorded in an internet address field of a client device record, the client device record having:

recorded in the client device record's mailbox address field, a mailbox address identical to the destination mailbox address of the email message, and,

recorded in the client device record's digital file format code field, a digital file format code indicating that the client device represented by the client device record is capable of receiving the digital format of the digital file.

46. The computer software product of claim 23 further comprising means, recorded on the recording medium, for recording a multiplicity of client device records representing a multiplicity of client devices, including means for recording for each client device a mailbox address, an internet address where the client is to be found on an internet, a digital file format code identifying a digital file format that the client device is capable of receiving, and a path name identifying a location in a file system where digital files for each client device are to be stored.

47. The computer software product of claim 23 wherein means for receiving an email message further comprises means, recorded on the recording medium, for receiving an email message by use of a standard email protocol.

48. The computer software product of claim 25 wherein the standard email protocol is SMTP.
- 5 49. The computer software product of claim 25 wherein the standard email protocol is POP3.
50. The computer software product of claim 23 wherein the file name includes a file name extension identifying the digital format of the digital file.
- 10 51. The computer software product of claim 23 wherein each client device represented by a client device record comprises automated computing machinery, a web browser, and an internet client having an internet address.
- 15 52. The computer software product of claim 23 wherein the means for downloading utilizes HTTP.
53. The computer software product of claim 23 further comprising:
- 20 means, recorded on the recording medium, for storing the digital file in a file system location having a digital file path name identical to a path name recorded in a path name field in a client device record, the client device record having recorded in its mailbox address field a mailbox address equal to the mailbox address of the email message; and
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means, recorded on the recording medium, for encoding the digital file path name and the file name of the digital file into an HTML document having a conventional file name;

5 wherein means for downloading the digital file to the client device further comprises means, recorded on the recording medium, for downloading the HTML document.

10 54. The computer software product of claim 31 wherein means for encoding the digital file path name and the file name of the digital file into an HTML document further comprises means, recorded on the recording medium, for encoding a URL in a hyperlink in an HTML document.

15 55. The computer software product of claim 31 wherein the conventional file name is "index.html."

56. The computer software product of claim 31 wherein the conventional file name is "index.htm."

20 57. The computer software product of claim 31 further comprising means, recorded on the recording medium, for storing the HTML document in the file system location identified by the path name.

25 58. The computer software product of claim 31 wherein means for downloading the digital file further comprises:

means, recorded on the recording medium, for receiving, from a client device, a first HTTP request message requesting the HTML file having the conventional file name, wherein the first HTTP request message includes a client internet address for the client device;

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means, recorded on the recording medium, for sending, in an HTTP response message to the client device, the HTML document having the conventional file name from a file system location identified a path name recorded in a client device record's path name field of a client record whose internet address field contains an internet address equal to the client internet address; and

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means, recorded on the recording medium, for receiving from the client device a second HTTP request message, wherein the second HTTP request message requests downloading of the digital file identified by the path name and the file name of the digital file encoded into the HTML document.

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59. The computer software product of claim 23 wherein means for receiving an email message further comprises means, recorded on the recording medium, posting the email message to a destination mailbox at the destination mailbox address.

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60. The computer software product of claim 23 further comprising means, recorded on the recording medium, for delivering the email message from the destination mailbox to an email client, wherein the means for delivering utilizes a standard email protocol.

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61. The computer software product of claim 38 wherein the standard email protocol is POP.
- 5 62. The computer software product of claim 38 wherein the standard email protocol is POP3.
63. The computer software product of claim 23 wherein the destination client device is an audio player and the digital format of the digital file is MP3.
- 10 64. The computer software product of claim 23 wherein the destination client device is a video player and the digital format of the digital file is MPEG.
65. The computer software product of claim 23 wherein the destination client device is a digital picture frame and the digital format of the digital file is JPEG.
- 15 66. The computer software product of claim 23 wherein the destination client device is a digital picture frame and the digital format of the digital file is GIF.
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